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BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 09/537,659
Filing Date: March 29, 2000
Appellant(s): MURTHY ET AL.

Daniel H. Bliss, Reg. No. 32,398
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed July 20, 2004.

(1) Real Party in Interest

A statement identifying the real party in interest is contained in the brief.

(2) Related Appeals and Interferences

The brief does not contain a statement identifying the related appeals and interferences which will directly affect or be directly affected by or have a bearing on the decision in the pending appeal is contained in the brief. Therefore, it is presumed that there are none. The Board, however, may exercise its discretion to require an explicit statement as to the existence of any related appeals and interferences.

(3) Status of Claims

The statement of the status of the claims contained in the brief is correct.

(4) Status of Amendments After Final

The appellant's statement of the status of amendments after final rejection contained in the brief is correct.

(5) Summary of Invention

The summary of invention contained in the brief is correct.

(6) Issues

The appellant's statement of the issues in the brief is correct.

(7) Grouping of Claims

Appellant's brief includes a statement that claims 1-6, and 7-9, and 10-16 do not stand or fall together and provides reasons as set forth in 37 CFR 1.192(c)(7) and (c)(8).

(8) Claims Appealed

The copy of the appealed claims contained in the Appendix to the brief is correct.

(9) Prior Art of Record

"Artificial Intelligence (Understanding Computers)", 1986 ISBN 0-8094-5675-3, pages 36-43.

"Quality by Design", by J. M. Juran, The Free Press, 1992, ISBN 0-02-916683-7, pages 406-427 (The Data Base, Motivation, Training), and 462-467 (Quality Planning for the Taurus).

"The Computer Science and Engineering Handbook", by Allen B. Tucker, CRC Press, ISBN: 0-8493-2909-4, 1996, page 1954, (The World Wide Web).

(10) Grounds of Rejection

All prior 35 USC 112 rejections are withdrawn, per Applicant's persuasive assertions.

All 35 USC 103 rejections are maintained, and presented below.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action: (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* v. *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows: Determining the scope and contents of the prior art. Ascertaining the differences between the prior art and the claims at issue. Resolving the level of ordinary skill in the pertinent art. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-16 are rejected under 35 U.S.C. 103(a) as being unpatentable.

Claim 1 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

Claim 1 is an independent "method" claim with 6 limitations, labeled A-F by the Examiner for convenience.

A-"selecting a vehicle program requirement from a library" is disclosed by Juran page 462 and 465 "Best in Class", and page 407 "data base".

Note that Juran discusses the procedure that Ford used to design the Taurus automobile. Juran page 465 discusses how Ford began with "literally tens of thousands of quality features that enter into the design, manufacture, sale, and service or automobiles". Ford then "selected those vital few features which directly impacted the senses of these major customers. The vital few turned out to be more than four hundred features!" Ford then expressed those features "in customers' language, which is usually in qualitative terms. The engineers needed to translate everything into technological, measureable terms: temperature in degrees, distance in meters, time in minutes, noise in decibels. This translation had always been a part of the quality planning process but became acute because of the many sensory qualities in the list."

Additionally, Juran page 466 states "Within Ford, much was done to secure factory idea on process development. Employees from all manufacturing and assembly areas were asked for their suggestions. More than 1,400 "wants" were identified and evaluated for potential incorporation into the design of the Taurus."

C-"selecting an information database containing information related to the design of the vehicle from the library" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 408 "Tables of properties of materials" and "Tables of process capabilities".

E-"determining if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Additionally, Juran page 466 states "Within Ford, much was done to secure factory idea on process development. Employees from all manufacturing and assembly areas were asked for their suggestions. More than 1,400 "wants" were identified and evaluated for potential incorporation into the design of the Taurus."

F-"using the information from the information database in the design of the vehicle, if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 426 "Best in Class". Additionally, Juran page 466 states "Within Ford, much was done to secure factory idea on process development. Employees from all manufacturing and assembly areas were asked for their suggestions. More than 1,400 "wants" were identified and evaluated for potential incorporation into the design of the Taurus."

Juran does not expressly disclose the two additional limitations.

B-"[library] stored in a memory of a computer system, where the library is accessed through an information portal on the computer system" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."

D-"wherein the information database is accessed through the information portal" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Claims 2-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

Claims 2-6 depend from claim 1, with the following additional limitations.

In claim 2, "selecting additional information for determining if the [additional] information from the information database correlates with the program requirement, if the information from the information database does not correlate with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

In claim 3, "determining if a portion of the information from the information database correlates with the program requirement based on the additional information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

In claim 4, "using the portion of the information from the information database that correlates with the program requirement in the design of the vehicle, if a portion of the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class".

In claim 5, "selecting through the information portal additional information regarding the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 462 and 465 "Best in Class".

In claim 6, "using the additional information to determine whether to generate new information for use in the design of the vehicle and generating new information if determined that the new information should be generated" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class", and page 465 "Ford selected those vital few features which directly impacted the senses of these major customers".

The motivation for claims 2-6 is identical to the motivation for claim 1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

Claim 7 is an independent "method" claim with 9 limitations, labeled A-I by the Examiner for convenience.

Note that claim 7 is almost identical to claim 6 above, except that claim 7 is expressly "web-based".

A-"selecting a vehicle program requirement from a library" is disclosed by Juran page 426 "Best in Class", and page 407 "data base".

C-"selecting an information database containing information related to the design of the vehicle from the library" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 408 "Tables of properties of materials" and "Tables of process capabilities".

E-"determining if the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases".

F-"using the information from the information database in the design of the vehicle, if the information from the information database correlates with the program requirement" is disclosed

by Juran page 409 "critical aspects of construction and use of data bases". Also see page 426 "Best in Class".

G-"selecting through the information portal additional information for determining if the [additional] information from the information database correlates with the program requirement, if the information from the information database does not correlate with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

H-"determining if a portion of the information from the information database correlates with the program requirement based on the additional information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

I-"using the portion of the information from the information database that correlates with the program requirement in the design of the vehicle, if a portion of the information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Best in Class".
Juran does not expressly disclose the 2 additional limitation.

B-"[library] stored in a memory of a computer system, wherein the library is accessed through a web-based information portal on the computer system" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."

D-"wherein the information database is accessed through the information portal" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Claims 8-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

Claims 8-9 depend from claim 7, with the following additional limitations.

In claim 8, "selecting through the information portal additional information regarding the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

In claim 9, "using the additional information to determine whether to generate new information for use in the design of the vehicle and generating new information if determined that the new information should be generated" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

The motivation for claims 8-9 is identical to the motivation for claim 1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Claim 10 is rejected under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

Claim 10 is an independent "method" claim with 12 limitations, labeled A-J by the Examiner for convenience.

Note that claim 10 is almost identical to claim above, except that claim 7 is expressly "web-based".

A-"selecting a vehicle program requirement from a library" is disclosed by Juran page 462 and 465 "Best in Class", and page 407 "data base".

C-"selecting an information database of verification information for the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 408 "Tables of properties of materials" and "Tables of process capabilities".

E-"determining if the verification information from the information database correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases".

F-"using the information from the information database in the design of the vehicle, if the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases". Also see page 426 "Best in Class".

G-"selecting through the information portal additional information regarding the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

H-"using the additional information to determine if a portion of the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

I-"using the portion of the verification information that correlates with the program requirement if determined that a portion of the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".

J-"generating new information if a portion of the verification information does not correlate with the program requirement" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 426 "Enlarge the planners' data base".
Juran does not expressly disclose the 2 additional limitation.

B-"[library] stored in a memory of a computer system, wherein the library is accessed through a web-based information portal on the computer system" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."

D-"wherein the information database is accessed through the information portal" is disclosed by Tucker at page 1954 "The World Wide Web (WWW) is the fastest-growing protocol on the Internet."

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Claims 11-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Juran in view of Tucker.

Claims 11-16 depend from claim 10, with the following additional limitations.

In claim 11, "determining through the information portal if a condition is known by which the verification information was generated, if a portion of the verification information correlates with the program requirement" is disclosed by Juran page 409 "critical aspects of

construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".

In claim 12, "generating new verification information if the condition by which the verification information was generated is not known in the design of the vehicle" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".

In claim 13, "determining confidence in the portion of the verification information that correlates with the program requirement if the condition by which the verification information is generated is known" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".

In claim 14, "performing a computer-aided engineering analysis of the verification information if not confident in the verification information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".

In claim 15, "using the portion of the verification information and the results of the computer aided engineering analysis in the design of the vehicle if confident in the computer-aided engineering analysis" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".

In claim 16, "using the portion of the verification information in the design of the vehicle if confident in the verification information" is disclosed by Juran page 409 "critical aspects of construction and use of data bases", and page 409 "scientific tools... Validity of conclusions... scientific approach" and page 426 "Enlarge the planners' data base".

The motivation for claims 11-16 is identical to the motivation for claim 1. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

(11) Response to Argument

Applicant asserts the following arguments: enablement, written description, definiteness, and obviousness. The arguments regarding 35 USC 112 (enablement, written description, and definiteness) are persuasive, and the rejections under 35 USC 112 are withdrawn.

Applicant asserts that the limitations of claim 1 are not disclosed by Juran and Tucker. The examiner concedes that Juran does not use the exact same terminology as claim 1. For example, in claim 1 the first limitation is "selecting a vehicle program requirement from a library". Juran does not use the claim 1 term "library", but rather uses the equivalent term "data base". The Applicant does not make any assertion that the claim term "library" is not disclosed by the prior art term "data base".

Similarly, Juran does not use the claim 1 term "selecting a vehicle program requirement". However, Juran does use the term "Best in Class" at page 465, and states "Ford selected those vital few features which directly impacted the senses of these major customers. The vital few turned out to be more than four hundred features!". Thus, Juran's four hundred features appear to disclose the claim 1 term "a vehicle program requirement".

Note that Juran discusses the procedure that Ford used to design the Taurus automobile. Juran page 465 discusses how Ford began with "literally tens of thousands of quality features that enter into the design, manufacture, sale, and service or automobiles". Ford then "selected those vital few features which directly impacted the senses of these major customers. The vital few turned out to be more than four hundred features!" Ford then expressed those features "in customers' language, which is usually in qualitative terms. The engineers needed to translate everything into technological, measureable terms: temperature in degrees, distance in meters,

time in minutes, noise in decibels. This translation had always been a part of the quality planning process but became acute because of the many sensory qualities in the list."

Additionally, Juran page 466 states "Within Ford, much was done to secure factory idea on process development. Employees from all manufacturing and assembly areas were asked for their suggestions. More than 1,400 "wants" were identified and evaluated for potential incorporation into the design of the Taurus."

Thus, Juran's "quality features" disclose the claim 1 term "vehicle program requirement".

The remainder of Applicant's assertions regarding the disclosure of claim limitations are similarly unpersuasive. The prior art terminology is not identical, but one of ordinary skill in the art would interpret the prior art as disclosing all of the claimed limitations. In particular, the prior art terminology must be interpreted in the context of the entire prior art publication.

Applicant also asserts that the motivation to combine Juran with Tucker is not adequate. However, the examiner maintains that it would have been obvious to a person of ordinary skill at the time of invention to use Tucker's "Internet" to modify Juran's quality methods in order to inexpensively store large amounts of data, and to allow instant and simultaneous access to the data from multiple computers (or "information portals").

Additionally, storing databases on internet accessible systems provides other substantial advantages. First, there are profitable economies of scale if the database is stored at a central location with large memory, rather than distributed at multiple locations with small memories, because small memories are more expensive. Second, database centralization protects the information by allowing stronger access control (better security). Third, backup is facilitated if

the database is centralized. And fourth, product development time can be substantially reduced if the databases are internet accessible, because teams of engineers around the world can work on the same project around the clock in a sequential manner. This type of international sequential development is common for large projects of international companies, such as airplanes and cars.

In summary, all of the obviousness rejections are maintained.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

Eduardo Garcia-Otero, Assistant Examiner Eduardo García Otero 11/5/04

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